

REMARKS

Claims 1-10, 12-21 and 23-31 are pending in the application

Claims 1-8, 10, 12-19, 21 and 23-31 have been rejected.

Claims 1, 9, 12, 20, 23, and 30 have been amended.

Claim 32 has been added.

Applicants have amended the above claims in general to correct formal matters or to provide clarity to the claim language. Applicants respectfully submit that these amendments are not intended to narrow the scope of the claims, unless specifically discussed below. Applicants further reserve the right to pursue the original claims in the future, for example, in a continuing application. Support for the above claim amendments can be found in the original Application and at least in paragraphs 0035-0042 of the Application.

Allowance of Claims

Applicants wish to thank the Examiner for the indicated allowability of claims 9 and 20 if rewritten in independent form. At this time, however, Applicants do not choose to amend the indicated claims, but instead to otherwise amend the independent claims as shown above. Applicants have also added new independent claim 32 which contains limitations of allowed claims 9 and 20. Applicants reserve the right to amend claims 9 and 20, as suggested by the Office Action, in the future, if necessary.

Rejection of Claims under 35 U.S.C. §102

Claims 1-8, 10, 12-19, 21 and 23-31 stand rejected under 35 U.S.C. §102(e) as being anticipated by U.S. Patent Publication No. 2005/0132258 naming Chen et al. as inventors ("Chen"). Applicants traverse this rejection.

Independent Claims 1, 12, 23, and 30:

While not referring to any specific claims, the Office Action rejects independent claims 1, 23, and 30 on the basis of paragraph 0086 of Chen since no other paragraphs of Chen are cited. *See* Office Action, p. 2. Independent claim 12 also appears to be rejected based upon paragraph 0086 together with the assertion that "Chen's monitoring is apparently implemented with software." *See id.* But these claims, prior to amendment, each recite a limitation requiring that a real-time physical link error rate be estimated using an operational link error rate. Applicants respectfully submit that the cited section of Chen fails to teach the estimation of any kind of error rate.

For the Examiner's convenience the cited section of Chen is given below:

[0086] In the normal monitoring mode, active line integrity may be adapted to utilize the 8B/10B decoder and count the number of 8B/10B code violations for every slice. The number of errors found in the CRC for each frame and the number of ordered set violations for the whole camping period may be recorded. If the number of error exceeds a threshold for a particular slice, the active SI may generate an alarm which may indicate the associated slice number such as -16, -15, ..., 0, ..., 15, 16. This may be a part of a ranging process.

The above-quoted passage from Chen provides no explicit disclosure of the claimed real-time physical link error rate. Instead, the cited section provides only for a CRC of received frames, which is equated by the Office Action to the claimed "operational link

error rate.” *See* Office Action, p. 2. The Office Action states that since “[e]rrors counted by Chen’s monitor include CRC errors, and provide an ‘operational link error rate’ measure,” it follows that “Chen discloses a ‘monitoring subsystem to determine an operational link error rate of a link and to estimate a real-time physical link error rate of said link using said operational link error rate.” *Id.* Applicants respectfully submit that, even if Chen’s CRC errors are analogous to the claimed operational link error rate, it does not necessarily follow that Chen discloses a monitoring subsystem to estimate a real-time physical link error rate using these CRC errors. Chen may provide an operational link error rate and yet perform no estimation of any kind. Thus, it cannot be said that Chen’s disclosure implicitly provides the claimed real-time physical link error rate.

In spite of the foregoing, the Applicants have amended independent claims 1, 12, 23, and 30 to further distinguish the present claims over Chen by including a limitation of using a defined hysteresis factor to estimate the real-time physical link error rate. Applicants respectfully submit that the addition of this limitation further distinguishes claims 1, 12, 23, and 30, and all claims depending upon them, from Chen since Chen provides no disclosure of the claimed hysteresis factor.

Thus, for at least these reasons, independent claims 1, 12, 23, and 30 are each patentably distinct over Chen, and are in condition for allowance. Thus, for at least these reasons, Applicants respectfully request the Examiner’s reconsideration and withdrawal of this rejection against these claims and their respective dependent claims (claims 2-8, 10, 13-19, 21 and 24-31).

Claims 3, 14, and 26

Dependent claims 3, 14, and 26 include an additional limitation of “said determining, and said estimating are performed at least partially concurrently with said transferring.” Applicants respectfully submit that the cited sections of Chen fail to provide disclosure of this limitation.

The Office Action asserts that “Chen’s error rate monitoring is performed on data transmitted between ‘elements’ of a network and apparently operates ‘at least partially concurrently’ with the data reception, as data reception is apparently not interrupted for such monitoring.” Office Action, pp. 2-3 (emphasis added). However, Applicants submit that all data in a given transmission may be received without interruption and yet neither the operational link error rate would be determined concurrently with transmission of the data nor the real-time physical link error rate be estimated concurrently with transmission of the data. This occurs, for example, when data is first transmitted in an uninterrupted fashion *after* which the operational link error rate is determined and the real-time physical link error rate is estimated. In fact, since Chen discloses that bit error rates are generated based on a “bit-by-bit comparison” of at least a portion of the “received” data stream with a “corresponding portion of the expected data” (*see, e.g.,* Chen, ¶¶ [0036], [0039], [0061], [0068], [0073], [0074]), Chen may not determine the operational link error rate or estimate the real-time physical link error rate until all data is received (assuming, for the sake of argument, that the invention of Chen performs said estimation at all). In such a scenario, the mechanism of Chen fails to perform these functions concurrently with transmission of the data.

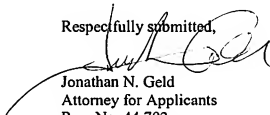
Thus, for at least this further reason, Applicants respectfully submit that dependent claims 3, 14, and 26, and all claims depending therefrom, are further patentably distinct over Chen. Therefore, Applicants further assert their request that the Examiner reconsider and withdraw the rejections against claims 3, 14, and 26, and all claims depending therefrom, and provide an indication of the allowability of same.

CONCLUSION

In view of the amendments and remarks set forth herein, the application and the claims therein are believed to be in condition for allowance without any further examination and a notice to that effect is solicited. Nonetheless, should any issues remain that might be subject to resolution through a telephonic interview, the Examiner is invited to telephone the undersigned at 512-439-5090.

If any extensions of time under 37 C.F.R. § 1.136(a) are required in order for this submission to be considered timely, Applicant hereby petitions for such extensions. Applicant also hereby authorizes that any fees due for such extensions or any other fee associated with this submission, as specified in 37 C.F.R. § 1.16 or § 1.17, be charged to deposit account 502306.

Respectfully submitted,



Jonathan N. Geld
Attorney for Applicants
Reg. No. 44,702
(512) 439-5090 [Phone]
(512) 439-5099 [Fax]